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Title: Dichroic Polarizer

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Claims

1. A dichroic polarizer including a substrate and a layer dichroically absorbing electromagnetic radiation, wherein two reflecting coatings are introduced, at least one of which being partially transmitting, with the layer dichroically absorbing electromagnetic radiation located between the two reflecting coatings.
2. A dichroic polarizer of Claim 1, wherein both reflecting coatings are made partially transmitting.
3. The dichroic polarizer of Claim 1, wherein materials and thicknesses of the layers dichroically absorbing electromagnetic radiation as well as the reflecting coatings are chosen from the requirement to obtain, at the exit of the dichroic polarizer, an interference minimum for the absorbing component of electromagnetic radiation for, at least, one wavelength value.
4. The dichroic polarizer of any of the Claims 1 or 2 or 3, wherein at least one coating reflecting electromagnetic radiation is made of metal.
5. The dichroic polarizer of any of the Claims 1 or 2 or 3, wherein at least one coating reflecting electromagnetic radiation is made of multilayer dielectric mirror of the interchanged layers of materials with high and low refraction coefficients.
6. The dichroic polarizer of any of the Claims 1 or 2 or 3 or 4 or 5, wherein the layer dichroically absorbing electromagnetic radiation is made of an oriented layer of at least one dichroic dye applied from the lyotropic liquid crystalline state.